

**TESTIMONY OF PETER B. TEETS  
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**BEFORE THE SUBCOMMITTEE ON SCIENCE, TECHNOLOGY AND SPACE  
OF THE  
SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION**

**May 20, 1999**

Chairman Frist, Senator Breaux, and members of the Committee, thank you for holding today's hearing and permitting me to express the views of Lockheed Martin Corporation on space launch issues. Lockheed Martin believes that this is a particularly opportune time for our Nation to show its leadership in space transportation. Several of the legislative initiatives are very much tied to maintaining U.S. competitiveness in today's market. In that regard, Lockheed Martin supports the industry position on extending the Commercial Space Launch Indemnification coverage as this has become the international practice. However, today I would like to focus my comments on what can be done by the Government to best assure future U.S. competitiveness.

Lockheed Martin had the opportunity to present testimony at the subcommittee hearing on an earlier version of S. 469 last September. I will not repeat that testimony today.

The American commercial space launch industry faces growing international competition. While a number of American competitors – including Lockheed Martin – are developing new expendable launch vehicles, we must face the fact that reworking expendable launch technology is only a partial solution. You need only read the recent reports about the European Space Agency's aggressive commitment to subsidize the development of *reusable* launch vehicles to realize that the next generation of space launch systems and access to space is about to begin,

whether America takes the lead or not.

As the Government's partner in the X-33 cooperative technology demonstration project, and as the developer of VentureStar™, Lockheed Martin has carefully considered a wide range of financial options for our efforts to develop America's first single-stage-to-orbit reusable launch vehicle. At every turn, however, our outside financial advisors have come to us with a very consistent message: Wall Street will finance space systems built with existing technology, but Wall Street will not finance systems built with promising revolutionary technologies – not at any price.

Lockheed Martin has therefore concluded that the private financial markets have already picked a winner in the battle between old and new technology. The winner is the status quo. Averting this dilemma leaves two alternatives: either the Government fully funds the development of new systems, as has been done historically, or the Government assists in reducing the risks sufficiently to attract private financing, but does not carry the full budget burden. S. 469 attempts to do the latter while sharing the risks with industry and therefore minimizing or even eliminating actual expenditures by the Government. Consequently, Lockheed Martin continues to support S. 469 enthusiastically.

It should come as no surprise that S. 469 received broader support when it was reintroduced in January. This bill brings together two ideas that have mass appeal: the idea of maintaining America's leadership in space, and the idea of doing so more cheaply than the Government has ever done before. Let me emphasize that last point: through a loan guarantee program, the Government can assure both commercial and Government access to space far more cheaply than if it followed its past practice and paid the full cost of developing next-generation

space transport vehicles.

The federal Government has a long history of using public policy mechanisms to promote desirable activities by private individuals and industry in lieu of providing direct funding. While there has always been some controversy over the legitimacy of using Government as a means of influencing private behavior, the fact of the matter is that these policies have become widely used tools. On an individual level, often these incentives become part of the tax code, as with deductions for home mortgage interest to spur home ownership, charitable contributions to encourage private philanthropy, or tax exemptions for retirement accounts to increase savings rates. On the business level both tax incentives and loan guarantees have been used to encourage investment in research and development, promote American competitiveness in the international marketplace and provide Government leadership in areas of strong national interest.

Loan guarantee programs have a long and successful history. Typically, the Government relies on loan guarantees where some national interest demands Government leadership, but where it is more appropriate for the private sector to take primary responsibility for fulfilling that interest in an efficient, economical, and competitive way. Loan guarantees are not subsidies. In a loan guarantee program, the Government does not transfer public money to private corporations. Instead, the Government merely shares a portion of a risk that is borne primarily by the private sector.

You may ask: why should the Government assume any risk along with a private company? Why not just let the market decide whether a private venture is worth pursuing? The answer is simple: even the best-known free-market economists – Milton Friedman, Richard Posner, and others – recognize that sometimes there are “market failures.”<sup>1</sup> And one of the classic examples of

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<sup>1</sup> See Richard A. Posner, *On Theory and Practice: A Reply to “Richard Posner’s Praxis*, 49 Ohio St. L. J. 1077, 1078 (1989) (“Wealth in the sense in which I use the term is the concept of welfare employed by most

a market failure is where there is a scarcity of information.<sup>2</sup> Our outside financial advisors tell us that is exactly the case here: because VentureStar and some other reusable launch vehicles currently under design and development use revolutionary technologies, there is insufficient information from which private investors can ascertain the likelihood of our success. Never mind that the payoff will be huge, reducing expected per-pound launch costs by a factor of ten – the markets simply can't assess the technology.

That is where loan guarantees come in. The Government has used loan guarantees to achieve important national objectives in at least four different areas, and these precedents show compellingly why the relatively modest loan guarantee program contemplated by S. 469 is a good idea at a critical time.

### ***Fostering American Competitiveness in the International Marketplace***

The Government has long used loan guarantees to support the efforts of American companies trying to compete against often-subsidized foreign competitors. The best example of a loan guarantee program to foster American competitiveness in the international marketplace is the program administered by the Export-Import Bank of the United States, which was established in 1945 for the purpose of financing and facilitating exports by U.S. companies.<sup>3</sup> Ex-Im Bank is an enormous enterprise, issuing loan guarantees backing more than \$6.15 billion in loans in fiscal year 1998 alone.<sup>4</sup> What's more, \$2.6 billion of these loan guarantees were targeted in the aerospace industry, specifically to finance the sales of American-built commercial aircraft to

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economists in addressing problems of market failure, is the basis of the Marshallian demand curve, and is the heart of the classical economic tradition that runs from Adam Smith to Milton Friedman.”).

<sup>2</sup> *Id.*

<sup>3</sup> Note, *A Would-Be Tiger: Assessing Vietnam's Prospects from Gaining Most Favored Nation Status from the United States*, 38 Wm. & Mary L. Rev. 1583, 1594 n.82 (1997).

<sup>4</sup> *Export-Import Bank of the United States 1998 Annual Report*.

foreign buyers who otherwise probably would have bought from a foreign competitor.<sup>5</sup> The cost to the Government of Ex-Im Bank's 1998 loan guarantees – meaning the risk-adjusted cost of issuing the guarantees – was \$570 million.

The Ex-Im example provides several lessons. First, loan guarantees have a proven track record of improving American competitiveness in the aerospace industry. Second, unlike direct loans or subsidies, loan guarantees permit relatively small amounts of money to be leveraged significantly. In the Ex-Im Bank example, a reserve of \$570 million in 1998 represented the cost of backing more than \$6 billion in total loans. We fully expect that the annual sums authorized under S. 469 would have this same effect, permitting commercial space launch companies to attract large amounts of private capital with a relatively small government reserve.

Let me add, by the way, that Ex-Im Bank is not the only example of a federal loan-guarantee financing program. The Overseas Private Investment Corporation and other entities serve similar roles in various markets.

### ***Encouraging Socially Desirable but Undervalued Enterprises***

On occasion, the Government has used loan guarantees to provide support to socially important activities that have not yet demonstrated their economic viability to private investors. The area that comes most readily to mind is higher education. When the Government established Sallie Mae, the Student Loan Marketing Association, in 1982, it provided Government-guaranteed borrowing authority for the first two years of Sallie Mae's operation.<sup>6</sup> The idea – which certainly rings true in this hearing – was that after an initial period, Sallie Mae would demonstrate its economic viability to the financial markets, and after that time it would be

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<sup>5</sup> *Id.*

<sup>6</sup> 20 U.S.C. § 1087-2(h)(2).

required to seek its financing there. The relationship between the Sallie Mae example and the structure of S. 469 is clear: in each case, the Government undertook involvement to overcome a market failure caused in part by a scarcity of information about the economic viability of the enterprise. Once the viability of the enterprise was proven, the need for Government guarantees was designed to and did “sunset” as the venture became a commercial success.

### ***Preserving America’s National Security Interests***

Loan guarantee programs also have been used as a means of preserving America’s national security interests. Most recently, in 1996 Congress established the Defense Export Loan Guarantee program to facilitate the sale of military hardware to our NATO and certain major non-NATO allies.<sup>7</sup> While the DELG program has come under criticism because the financial details of the statute have made the program relatively unattractive to potential borrowers, it represents a bipartisan political consensus that loan guarantees are an appropriate vehicle for achieving specific national security goals.

### ***Preserving American Jobs***

Fourth, loan guarantees have long been used to preserve key areas of employment in the American economy. An excellent example of a program designed to achieve this goal is the Maritime Administration’s Title XI loan guarantee program. The MARAD program was designed to protect jobs in the American shipbuilding industry, not only for the value of the jobs themselves, but also because of the critical need for skilled labor in that industry during times of military crisis. Just last month, Secretary of Transportation Rodney Slater announced that MARAD would guarantee loans worth \$1 billion on behalf of a Mississippi shipbuilding company.

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<sup>7</sup> 10 U.S.C. § 2540.

Announcing the guarantees, Secretary Slater stated that “this shipbuilding contract will benefit the nation as a whole because it creates jobs and helps to maintain a shipbuilding workforce available to meet defense needs when necessary.”<sup>8</sup>

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Mr. Chairman, when you consider these precedents, it becomes clear that loan guarantees for the development of next-generation space launch vehicles are supported by long-standing practice. The program that would be established by S. 469 addresses each of the public concerns I have discussed. The U.S. commercial launch industry faces competition in reusable launch vehicles from subsidized foreign enterprises. Ever since President Kennedy set America on the path to the Moon almost 40 years ago, we have collectively recognized the social importance of access to space. We also fully expect significant job growth in our industry as the next century begins.

In this era of fiscal conservatism, it is more important than ever for the federal Government to scrutinize expenditures benefiting private companies. At the same time, some projects – and facilitating cheaper access to space through RLV development is certainly one – are sufficiently important to the national interest that they justify bringing limited public resources to bear. A targeted program of federal loan guarantees may represent the best balance between private innovation and assurance of the public interest in guaranteeing America’s future leadership in space.

Before concluding, I would also like to comment on the suitability of tax incentives as a spur to development of the next generation of space launch vehicles. Tax incentives, increasing

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<sup>8</sup> *Ingalls of Mississippi Gets \$1 Billion Contract to Build 2 Cruise Ships*, Memphis Commercial Appeal, April 10, 1999, at B2.

R&D tax credits, pass-through of tax credits to passive investors, are all positive efforts that benefit these new systems, but do not provide the up-front “stand-alone” capital that is so difficult to obtain in the early years of financing.

For all the reasons I have discussed today, Lockheed Martin strongly encourages Congress to pass S. 469 as quickly as possible. If our public and private institutions procrastinate while foreign-subsidized next-generation launch vehicles are developed, we will miss this window of opportunity to position ourselves in the global marketplace of the 21st Century. We believe that the sooner the launch industry can overcome its initial financial hurdles, the sooner America’s next odyssey in space can begin. Thank you.